

## ABSTRACT OF THE DISCLOSURE

A coating liquid for forming a silica-containing film with a low-dielectric constant which enables formation of low-density film having a dielectric constant as low as 3 or less and having excellent resistance to oxygen plasma and process adaptation but also in the adhesion to a substrate and film strength. A substrate coated with the silica-containing film having the above characteristics, obtained by the use of the above coating liquid. The coating liquid for forming a silica-containing film with a low-dielectric constant comprises a polymer composition mainly constituted by a polysiloxane and a readily decomposable resin, said polysiloxane being a reaction product between fine particles of silica and a hydrolyzate of at least one alkoxysilane represented by the following formula (I):  $X_nSi(OR)_{4-n}$ , wherein X represents a hydrogen atom, a fluorine atom, an unfluorinated or fluorinated alkyl group of 1 to 8 carbon atoms, an aryl group or a vinyl group; R represents a hydrogen atom, an alkyl group of 1 to 8 carbon atoms, an aryl group or a vinyl group; and n is an integer of 0 to 3.